**HomeCo Item Recommendation Campaigns Analysis**

Granify has completed our month-long test of the effectiveness of two campaigns on customers who added a kitchen item to their cart: one campaign displayed to the customer a kitchen item recommendation, while the other displayed a furniture item recommendation. Both campaigns were run on a random sample of visitors to HomeCo’s online store and each group was compared to a group of visitors who were eligible to be shown that recommendation but were not shown it.

We found that the campaign displaying a kitchen item recommendation resulted in a statistically significant increase in the average order value of $0.64 (0.55%) over the group that was not shown the recommendation. Meanwhile, displaying a furniture item recommendation resulted in a $1.54 (1.35%) increase in the average order value, *however this increase in average value was not statistically significant.* Even though the increase in average order value was higher for the furniture item campaign, there is a good chance that this was due to random chance and the campaign would not lead to increased order value going forward. **Bottom line, we are very confident that the kitchen item recommendation campaign will increase the average order value going forward, while we are not at all confident that the same would be true for the furniture item recommendation campaign.**

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| --- | --- | --- | --- |
|  | Change in Average Order Value | Average Order Value Lift | Change Is Statistically Significant? |
| Kitchen Item Recommendation | **+$0.64** | **+0.55%** | **Yes** |
| Furniture Item Recommendation | **+$1.54** | **+1.35%** | **No** |

Both campaigns were found to have a much higher click-through rate than the 2% or less found in previous attempts at creating engagement with HomeCo’s online store. To be precise, customers shown the kitchen item clicked through 16.47% of the time, while customers shown the furniture item did so just 15.40% of the time. **These high click-through rates suggest that displaying these recommendations will increase customer engagement with HomeCo’s website and are less likely to result in over-messaging that leads customers to disengage.**

We also looked at the Revenue Per Session Lift, or RPS Lift, of each campaign. This metric shows the percentage increase in revenue per session for the group selected to see the recommendation over the group selected to not see a recommendation, including those shoppers who did not put any kitchen items in their cart and so never had the opportunity to see a recommendation. This metric is a good way to assess how each campaign would affect revenue from the online store.

The RPS Lift for the kitchen item recommendation campaign was 3.11%, while for the furniture item recommendation campaign it was 2.84%. **Both campaigns increased average revenue per session for customers who put a kitchen item in their cart, but the kitchen item recommendation campaign led to a slightly higher increase.**

We also calculated the Conversion Rate Lift, or CVR Lift, for each campaign. This measures how much a campaign increased the odds that a customer session would end with a purchase. The furniture item recommendation increased the conversion rate by 2.20%, while the kitchen item recommendation increased the conversion rate by just 0.61%. **Both campaigns increased the conversation rate, but the increase was higher for the furniture item recommendation.**

|  |  |  |
| --- | --- | --- |
|  | Revenue Per Session Lift | Conversion Rate Lift |
| Kitchen Item Recommendation | **+3.11%** | **+0.61%** |
| Furniture Item Recommendation | **+2.84%** | **+2.20%** |

Finally, we looked at the daily CVR Lift and RPS Lift for both sets of recommendations. The only finding of note here is that the CVR Lift and RPS Lift for both campaigns was not consistently positive on a daily basis, despite being positive for the month as whole. As we said above, some random variation on this metric is to be expected, especially when we drill down to smaller timeframes, but of course ideally we’d like to see more consistency with this metric.

**Recommendations**

We recommend that HomeCo implement the kitchen item recommendation campaign. We can confidently say customers who were shown this recommendation had a higher order value on average, which we cannot say about the furniture item recommendation, and it was associated with an increase in revenue per session and the conversion rate. Furthermore, this campaign increased engagement with its high click-through rate. It’s very likely that implementing this campaign now will lead to more revenue and more lifetime customer value via higher engagement with the shopping experience.

We know that HomeCo is concerned about reducing its risk going forward and wants to feel more confident in the performance of its online store, which is why we recommend the kitchen recommendation campaign over the furniture recommendation campaign. The furniture recommendation campaign would be more risky because there is a good chance the positive results we found for it in our tests would not repeat themselves going forward if it was implemented for all sessions.

The only concern we have about the kitchen item recommendation campaign is that the daily change in the conversion rate and revenue per session was not consistently positive on all days, even though these were positive over the course of the whole month. We think this is likely just natural random variation and maintain our recommendation to implement the campaign regardless.